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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,076	02/27/2002	Charles E. Evans	MAIL.STN	4904

7590 01/21/2004
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EXAMINER

CONLEY, SEAN E

ART UNIT PAPER NUMBER

1744

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,076

Applicant(s)

EVANS, CHARLES E.

Examiner

Sean E Conley

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Braun, Jr. (Patent Application Publication US 2003/0127506 A1).

Braun teaches a method and mailbox and for decontaminating mail. The decontaminating mailbox (4) is formed from a top surface (6), a floor (8), a rear wall (10) and a door (12), all of which cooperate to define an inner chamber (14). Positioned inside the upper portion of the inner chamber (14) are electromagnetic radiation sources (16, 18, 20) which are used to sterilize mail deposited in the mailbox. The radiation sources are germicidal lamps that emit ultraviolet radiation. A specific lamp disclosed as a suitable germicidal lamp is the type GSL238T5L/C UV available from Atlantic Ultraviolet Corporation. This specific model of lamp is a fluorescent lamp (see paragraphs [0023] –[0026]).

Additionally, Braun discloses an electric door switch serially connected to the electromagnetic radiation source. The door switches (44 and 46) are mechanically

and/or magnetically operable to determine the status of the front door, i.e., opened or closed. The switches (44 and 46) are electrically connected to the controller (40) in series, such that both must be closed to allow the controller (40) to apply power to the lamps (16, 18, 20). If either or both of the switches (44 and 46) are opened while the lamps (16, 18, 20) are energized, the controller (40) de-energizes the lamps (16, 18, 20) (see paragraph [0031]).

Also, Braun discloses that additional sensors can be strategically placed within the mailbox (4) to provide a qualitative measure of the amount of material placed within the mailbox (4). This information is used by the controller (40) to control the decontamination duration. Generally, the mailbox (4) is operative in three modes: a start-up cycle, a decontamination cycle and a post-decontamination or self-cleaning cycle. The controller (40) monitors the elapsed time since the initiation of the decontamination cycle. At the end of the predetermined cycle time, the controller (40) removes power from lamps (16, 18, 20). Therefore, the controller (40) includes a timer that is activated when the door of the mailbox is closed and is configured to maintain the lamps (16, 18, 20) on for a sufficient period of time after the mailbox door is closed to sterilize the mail (see paragraphs [0035]-[0040]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 4-6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun, Jr. as applied to claims 1-3 above, and further in view of Mize et al. (Patent Application Publication US 2003/0124025 A1).

Braun, Jr. does not disclose an electric switch that is a push button switch which discloses when it is depressed. Braun, Jr. also does not teach a battery power pack for the ultraviolet radiation source or a photocell on the upper exterior of the mailbox configured to charge the battery power pack.

Mize et al. disclose a biologically safe mailbox. The invention is a bio-safe device (203) that is housed inside a common residential mailbox. A processor-based controller (101) depends on power delivered by a rechargeable battery that is recharged via a solar panel or line cord. The solar panel (204, 504) can either be placed on the exterior top or side of the mailbox (see figures 2 and 5, paragraphs [0049] and [0056]). The controller (101) delivers the power to the decontamination means. Additionally, the bio-safe device also uses a door switch (207) to signal the controller when the door (208) is opened or closed. The door switch (207) is an electric push button switch

located in an end portion of the mailbox and when the button is depressed the electric switch closes (see figure 2 and paragraphs [0053]-[0054]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Braun, Jr. and replace the power source and electric door switch means with an equivalent alternative such as a rechargeable battery connected to a solar panel and a push button switch for indicating the door is closed as taught by the decontaminating mailbox of Mize et al.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Braun, Jr. as applied to claim 2 above, and further in view of Holley, Jr. et al. (Patent Application Publication US 2003/0086818 A1).

Braun, Jr. does not teach a fluorescent tube positioned within a lower portion of the mailbox and covered by a transparent mail floor.

Holley, Jr. et al. disclose a portable mail sterilizer. The device includes a mail sterilization cabinet (2) having a cylindrical housing (11) mounted on a support frame (9). Two UVC light bulbs (12) are located within the cylindrical housing (11) with one being positioned near the top of the chamber and the other being positioned under a grate (17). The grate (17) is provided for supporting mail and/or packages and is transparent (see figure 2 and paragraph [0016]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mailbox of Braun, Jr. and include a

transparent mail floor with a UV lamp located below the floor in order to sterilize all exterior surfaces of the mail as taught by the mail sterilizer of Holley, Jr. et al.

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun, Jr. as applied to claim 1 above, and further in view of Stemmler (Patent Application Publication US 2003/0133379 A1).

Braun, Jr. does not teach an electromagnetic source which comprises a microwave emitter positioned within a rear portion of the mailbox.

Stemmler discloses a method and system for decontaminating mail. A mailbox (210) is preferably airtight when closed. The postal worker opens the door (211) using latch (212). The door opens on hinges (214, 216). The controller (250) includes a mail presence sensor such as a light beam system or spring biased switch to detect the presence of mail. When the mailbox is opened, mail is inserted and the mailbox is closed, the controller (250) starts a decontamination cycle by initiating radiation sources (230, 232). In one embodiment, a microwave energy source is utilized for radiation sources (230, 232). The microwave emitters can be magnetrons or a Variable Frequency Microwave (VFM) microwave energy source can be utilized. The magnetron can be slidably fixed to a guide rail and moved within the mailbox. Additionally, a single mode 915 MHz microwave oven can be used to process the mail. Microwave sources and shielding systems and methods are known and not described in detail. (see paragraphs [0060]-[0061]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Braun, Jr. and replace the UV lamps with an alternative radiation source with which the mail can be decontaminated as taught by the mailbox of Stemmler. Regarding the positioning of the microwave emitter, Stemmler teaches that the microwave emitter can be positioned in multiple locations and therefore, it would have been obvious to one of ordinary skill in the art to position the microwave emitter at any ideal location within the mailbox, including the rear portion, in order to most effectively treat the mail. Furthermore, the prior art does not specifically recite that the mailbox is metal, however, metal is well known and widely used for constructing mailboxes. One of ordinary skill in the art would select a mailbox that is metal when using a microwave emitter in order to prevent the harmful microwaves from escaping. In addition, Stemmler teaches that shielding systems are well known when using microwave emitters.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Braun, Jr. in view of Mize et al.

Braun teaches a method and mailbox and for decontaminating mail. The decontaminating mailbox (4) is formed from a top surface (6), a floor (8), a rear wall (10) and a door (12), all of which cooperate to define an inner chamber (14). Positioned inside the upper portion of the inner chamber (14) are electromagnetic radiation sources (16, 18, 20) which are used to sterilize mail deposited in the mailbox. The radiation sources are germicidal lamps that emit ultraviolet radiation. A specific lamp disclosed

as a suitable germicidal lamp is the type GSL238T5L/C UV available from Atlantic Ultraviolet Corporation. This specific model of lamp is a fluorescent lamp (see paragraphs [0023] –[0026]).

Additionally, Braun discloses an electric door switch serially connected to the electromagnetic radiation source. The door switches (44 and 46) are mechanically and/or magnetically operable to determine the status of the front door, i.e., opened or closed. The switches (44 and 46) are electrically connected to the controller (40) in series, such that both must be closed to allow the controller (40) to apply power to the lamps (16, 18, 20). If either or both of the switches (44 and 46) are opened while the lamps (16, 18, 20) are energized, the controller (40) de-energizes the lamps (16, 18, 20) (see paragraph [0031]).

Also, Braun discloses that additional sensors can be strategically placed within the mailbox (4) to provide a qualitative measure of the amount of material placed within the mailbox (4). This information is used by the controller (40) to control the decontamination duration. Generally, the mailbox (4) is operative in three modes: a start-up cycle, a decontamination cycle and a post-decontamination or self-cleaning cycle. The controller (40) monitors the elapsed time since the initiation of the decontamination cycle. At the end of the predetermined cycle time, the controller (40) removes power from lamps (16, 18, 20). Therefore, the controller (40) includes a timer that is activated when the door of the mailbox is closed and is configured to maintain the lamps (16, 18, 20) on for a sufficient period of time after the mailbox door is closed to sterilize the mail (see paragraphs [0035]–[0040]).

However, Braun, Jr. fails to teach the fluorescent lamp, timer, and switch all contained within a single housing inside the mailbox.

Mize et al. disclose a biologically safe mailbox. More specifically, a bio-safe device (203) is installed inside of a common residential mailbox. The bio-safe device (203) contains the timer, control system, electronic switch and decontamination means all within a single housing which is then inserted into a conventional mailbox. A processor-based controller (101) depends on power delivered by a rechargeable battery that is recharged via a solar panel or line cord. The solar panel (204, 504) can either be placed on the exterior top or side of the mailbox (see figures 2 and 5, paragraphs [0049] and [0056]). The controller (101) delivers the power to the decontamination means. Additionally, the bio-safe device also uses a door switch (207) to signal the controller when the door (208) is opened or closed. The door switch (207) is an electric push button switch located in an end portion of the mailbox and when the button is depressed the electric switch closes (see figure 2 and paragraphs [0053]-[0054]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the decontamination means located in the upper portion of the mailbox to Braun, Jr. and combine the fluorescent lamps, timer, and an electronic push button switch into one assembly that is inserted into a common residential mailbox as taught by the biologically safe mailbox of Mize et al. It would have been obvious to mount the complete assembly into an upper portion since Braun, Jr. teaches that the fluorescent lamps and electronic switches are mounted in the upper region of the interior of the mailbox.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent Application Publication US 2003/016824 to Simon

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Conley, whose telephone number is (571) 272-1273. The examiner can normally be reached on Monday-Friday 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Robert Warden, can be reached at (703) 308-2920. The Unofficial fax phone number for this group is (703) 305-7719. The Official fax phone number for this Group is (703) 872-9310. The direct fax number to the (571) 273-1273.

When filing a FAX in Technology Center 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communications with the PTO that are not for entry into the file of the application. This will expedite the processing of your papers.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [robert.warden@uspto.gov]. All Internet e-mail communications will be made of record in the application file. PTO employees will not communicate with applicant via internet e-mail where sensitive data will be exchanged

or where there exists a possibility that sensitive data could be identified unless there is of record express waiver of the confidentiality requirements under 35 U.S.C. 122 by the applicant. See the Interim Internet Usage Policy published by the Patent and Trademark Office Official Gazette on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist, whose telephone number is (703) 308-0661.

Sean E. Conley
Patent Examiner
AU 1744

SEC *Ac*
January 5, 2004

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